DOCUMENT RESUME

ED 186 381 SP 015 873

AUTHOR Blomstedt, Bob
TITLE Management Engineered Teacher Education.
PUB DATE [80]
NOTE 15p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Accountability; *Competency Based Teacher Education; Educational Theories; *Management by Objectives; *Management Systems; *Skill Development; Teaching Methods; *Teaching Skills

ABSTRACT

"Management engineered" teacher education is an instructional method designed to assist teachers in the acquisition, maintenence, and improvement of essential knowledge, skills, attributes, and professional competencies which are necessary to function effectively in varied professional roles. The system aims at improving teachers' performances as instructors, group leaders, behavioral managers, and as management systems designers, implementors, and evaluators. The theory is based on two assumptions: a systems approach to classroom and professional management is essential to positive, accountable education, and the idea that the more systematic the process of developing a mangement system, the higher the probability of success in implementation of that system. (Author/LH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED186381

MANAGEMENT ENGINEERED TEACHER EDUCATION

Dr. Bob Blomstedt, Associate Professor
of Education
Texas A&I University
Kingsville, Texas 78363

Home Phone: 512/592-5579
Office Phone: 512/595-3203

Dr. Blomstedt received his Ph.D. Degree in mathematics education from The University of Texas and teaches the management component in the Texas A&I University doctoral program. He has been named an Outstanding Educator of America and listed in Whos Who in the South and Southwest. Previous articles published include:

"A Philosophical Approach in the Integrated Day," TASCD Journal, November, 1972.

"Teaching by Consensus," Texas Mathematics Teacher, May, 1977.

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Bob Blomstedt

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SP 015 873

ABSTRACT

Management Engineered Teacher Education is a delivery system designed to assist teachers acquire, maintain, and improve the essential knowledge, skills, attributes, and competencies needed to effectively function as a professional person, as a group leader, as a behavioral manager, as an instructional manager, and as a management systems designer, implementor, and evaluator. The fundamental precepts are that a systems approach to classroom and professional management is essential to positive, accountable education and that the more systematic the process of developing a management system, the higher the probability of success in implementation.

MANAGEMENT ENGINEERED TEACHER EDUCATION
Dr. Bob Blomstedt

Management Engineered Teacher Education is predicated on the hypothesis that teachers need to be educated through a format relating to four essential functions the teacher should effectively perform. It is further predicated upon the concept that once the essential knowledge, skills, attributes, and competencies have been "delivered," the teacher will be prepared for, and guided into, the formulation of a particular management system based upon his/her own philosophical decisions about education and about himself/herself. The fundamental precepts are that a system approach to classroom and professional management is essential to positive, accountable education, and that the more systematic the process of developing a management system, the higher the probability of success in implementation.

A system is defined by Webster in the New Collegiate Dictionary, 2nd. edition, as "an assemblage of objects united by some form of regular interaction or interdependence; an organic or organized whole; a complete exhibition of essential principles or facts arranged in a rational dependence or connection; a complex of ideas, principles, etc. forming a coherant whole." (5: p.863)

According to Wong and Raulerson a system consists of three basic components, an input component, a conversion component, and an output component. The conversion component involves the decision making process; it determines how the input is going to be converted into an output to achieve the desired goals. If a particular output does not attain positive results, the feedback process provides additional information to the input component for a recycling of the systems process. If the results are positive, the goals

have been achieved and the feedback process reinforces the sytems process used. (6: p.9)

Ames, in an article in The Elementary School Journal in 1978, lists several management skills that address the problems teachers face in setting up successful management systems. Included in the list are effective fact-finding, probing techniques, goal setting, participation skills, committee management, time management, rational planning, political planning, alternative selection, authority and responsibility, coordinating, delegation, design, monitoring strategies, corrective strategies, discipline, communication, leadership, and motivation. (1: p.13) The development of these skills can be effectively incorporated into the Management Teacher Education Program and refined through experience.

In Management Engineered Teacher Education a system is prescribed process of classroom management based on individual teacher attributes, philosophies, and strategies defined by individual teacher decisions which are engendered through comprehensive study and exploration of the professional, group leader, behavioral manager, and instructional manager functions teachers must perform in order to facilitate student learning and teacher actions. The program is designed to promote continuous teacher professional growth and the refinement of processes and systems whereby effective teaching and effective learning will be enhanced. It is designed to eliminate, to a great degree, the "shotgun approach" to teacher education that tends to scatter training and skill acquisition and fails to culminate in a workable systemic pattern for the individual teacher.

At the pre-service level the Management Engineered Teacher Education Program lends itself readily to a five component sequence of professional

education from which the prospective teacher candidate must matriculate. The components deal with the four delineated functions of the teacher including a professional engineering component, a leadership engineering component, a behavioral engineering component, an instructional engineering component, and a fifth component, a systems development component. In the fifth component of the program, the essentials of the first four components are utilized to guide the teacher candidate in developing, field testing, and evaluating a particular system that he/she feels is appropriate for him/her within the availability and confines of a cooperating public school. Through such a program it is felt that the necessary knowledge, skills, attributes, and competencies will be developed in teachers that will promote systems decision-making flexibilities essential to meeting the special needs of a particular group of learners in any particular setting.

For the supervisor in a local education association setting a similar format for inservice programs and workshops can be utilized to improve teacher competencies in identified areas of weakness and concern. The format will also aid the supervisor in the systematic development of appropriate and essential evaluative instruments and techniques to be used as aids in the identification of needs and in the assessing of effectiveness or ineffectiveness of systems currently being utilized by individual teachers.

Many topics for exploration and study will be directly or indirectly related to more than one of the teacher functions named. The teacher education program must be careful to note these cross-over patterns for the student so that the interrelatedness and the interdependence of the various components of a management system will always be observable. Each topic area, however, must receive special emphasis at some point in the teacher

development program and decisions concerning the appropriate component for emphasis must be made by someone at some level in the teacher education hierarchy whether the program is at the college/university level (pre-service) or at the local education association level (inservice). Sample topics that might be relegated to the various functions follow, but it must be emphasized that these topics are purely tentative in the development of any given teacher education program.

PROFESSIONAL FUNCTION COMPONENT
(Professional Engineering)

History of Education

- National
- State

Philosophies of Education

Structure of Education

- Federal
- State
- Local

Professional Organizations

Professional Relations

- Code of Ethics
- Rights & Responsibilities
- Collective Bargaining
- Due Process
- Continuing Contracts
- Teacher Assignment and Re-Assignment
- Line Staff Organization

Curriculum Responsibilities

Research Responsibilities

- Basic Types
- Research Consumer
- Research Contributor

Professional Growth

GROUP LEADER FUNCTION COMPONENT
(Leadership Engineering)

Teacher Modeling

Non-Instructional Responsibilities

- Duty Systems
- Environmental Regulation

Assessment Mechanisms

- Observation
- Anecdotal Records
- Sociometry

Counseling Techniques and Skills

- Rap Sessions
- Role Playing
- Interaction, Reaction, Action Skills

Group Cohesiveness Strategies

Standardized Testing

- Administering
- Diagnosing and Assessing

Value Clarification

BEHAVIORAL MANAGEMENT FUNCTION
(Behavioral Engineering)

Environmental Considerations

- Law-Federal, State, Local
- Societal Implications
- Local Board Policy
- Cultural Differences

Behavior

- Basic Needs
- Normal Behavior
- Deviant and Disruptive Behavior
- Mainstreaming Problems

Behavior Treatment Systems

- Goal Setting

Behavior Contracts
Corporal Punishment
Non-Corporal Punishment
Escalation Systems
The LEAST Method
Assertive Discipline
Behavior Modification
Reality Therapy

INSTRUCTIONAL MANAGER FUNCTION COMPONENT
(Instructional Engineering)

Basic Knowledge

Core Curriculum
Support Curriculum

Communications Skills

Language Skills
Speaking Skills
Writing Skills
Questioning Skills
Non-verbal Skills

Use of Research in Teaching

Time Space, Human Resource, Media and Materials Management

Basic Learning Theories for Teachers

Basic Learner Needs
Developmental Stages of Learners
Major Learning Theories

Cumulative & Summative Evaluation of Student Learning

Diagnosing & Prescribing
Instructional Goals and Objectives

Motivation Skills & Techniques

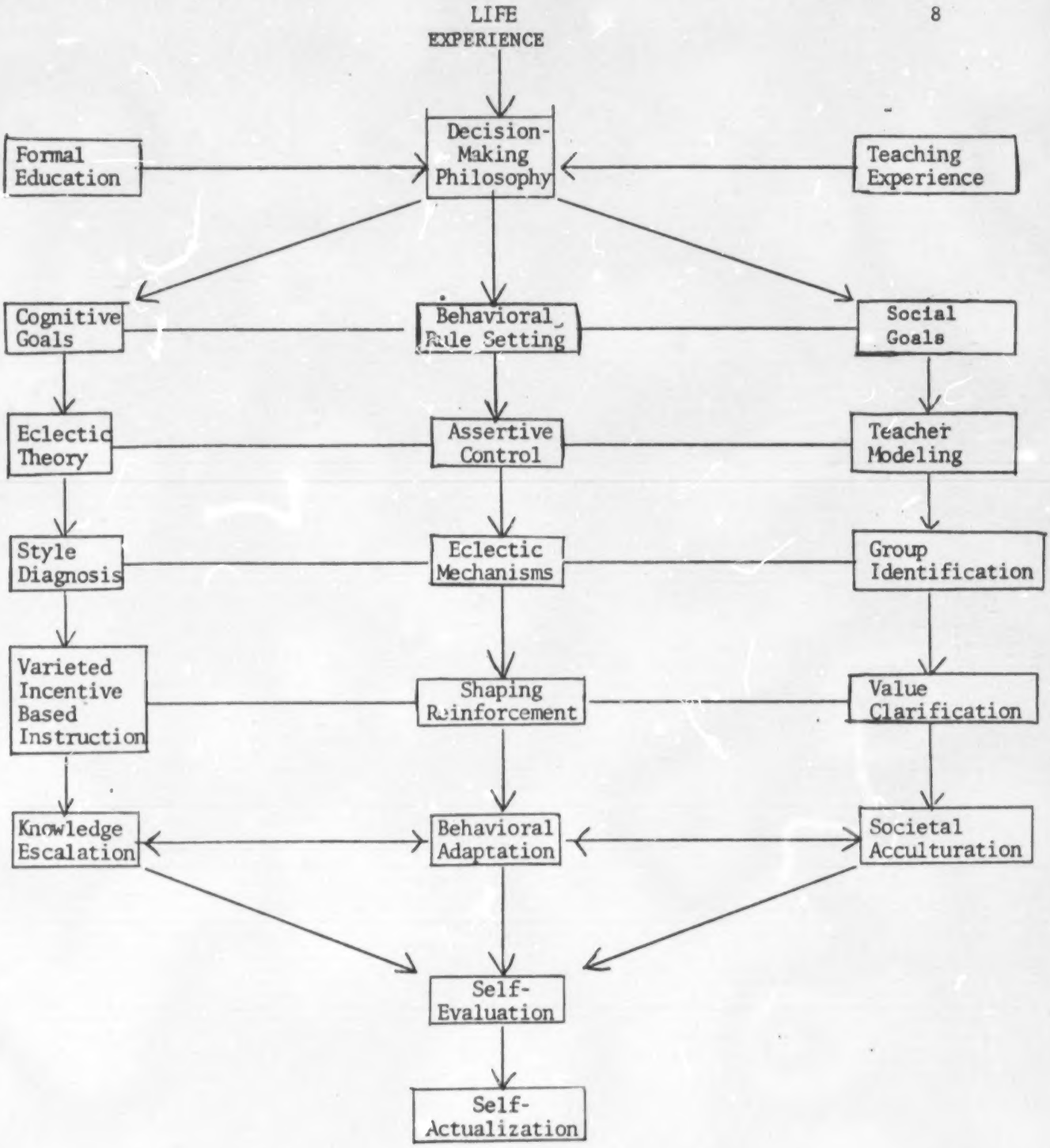
Methods of Teaching

Large Group
Small Group
Individualization
Personalization
Learning Centers
Lecture
Programmed Instruction

Instructional Television and Movies
Learning Contracts

The process of classroom management is truly complex and is an intricate and involved assemblage of components and sub-systems. This composite assemblage comprising the process of education requires that all aspects of the total professional person be brought to bear upon decisions that affect student knowledge escalation, behavioral adaption, and societal acculturation. The complexity of the task demands the best in planning and in systems designing in order to answer for the teacher the simple, basic, one-essential question with which each new teacher is finally faced. What do I do when I stand face to face in front of my class of third graders tomorrow? To deal with this basic question every teacher, in essence, builds some kind of a system. Some are successful; many are not as successful as they could be; some are highly ineffective. The job of teacher education is to provide for teachers, in an organized effective manner, the necessary knowledge, skills, attributes, and competencies essential to efficient systems construction, and to assist each prospective teacher in the design of a particular system to be tried and evaluated. The Management Engineered System is designed to fulfill this basic need in teacher education today, and is adaptable to any particular philosophy espoused by an institution engaged in teacher education.

A sample personal management system diagram is found on the following page. This particular system is grounded in a decision-making philosophy of education developed from the psychological field valences of life experience, formal education, and teaching experience. This decision-making philosophy is interjected into the classroom scene via a three-track scheme of management design evolving around group and individual cognitive, social, and behavioral rules and goals.


LIFE EXPERIENCE
Formal Education
Decision-Making Philosophy
Teaching Experience
Cognitive Goals
Behavioral Rule Setting
Social Goals
Eclectic Theory
Assertive Control
Teacher Modeling
Style Diagnosis
Eclectic Mechanisms
Group Identification
Varieted Incentive Based Instruction
Shaping Reinforcement
Value Clarification
Knowledge Escalation
Behavioral Adaptation
Societal Acculturation
Self-Evaluation
Self-Actualization

The cognitive aspect of the system focuses on learning theory through an eclectic viewpoint weighted slightly toward theory espoused by Spence and Gagnè. It then applies these theories to learning styles beginning with simplistic separation into groups of Field Sensitive and Field Independent and graduating into more sophisticated diagnosis and personalization. A variety of instructional devices are advocated with reading centers and listening centers essential components if applied to elementary school classrooms. Other centers are optional at any grade level. Instruction and evaluation is followed by immediate feedback with praise and incentives integrated into the knowledge escalation plan.

The behavioral component of the system begins with definitive rule setting. Clear and concise understanding of rules is mandatory with the teacher engaging in assertive behavior. Techniques are drawn from several behavioral control systems depending on circumstances and individuals. This implies eclectic mechanism application. Each mechanism results in behavior shaping reinforcement leading to individual behavioral adaptation.

The social component begins with group and personal goal setting. Goals are supported by teacher modeling and by implementation of a variety of group identification techniques. Numerous value clarification devices are incorporated periodically into the system on a planned basis and also periodically at unscheduled intervals whenever circumstances seem to warrant. Societal acculturation within the class group is intended with application to the world at large.

In summary, the Management Engineered Teacher Education Program is a delivery system designed to assist teachers acquire, maintain, and improve the essential knowledge, skills, attributes, and competencies needed to

effectively function as a professional person, as a group leader, as a behavioral manager, as an instructional manager, and as a management systems designer, implementor, and evaluator. For the undergraduate teacher education program this delivery system implies the construction of five components in the program that deal with basic essentials in the categories of (1) the professional function of the teacher (professional engineering); (2) the group leader function of the teacher (leadership engineering); (3) the behavioral management function of the teacher (behavioral engineering); (4) the instructional manager function of the teacher (instructional engineering); and (5) the systems design function of the teacher (design engineering).

The individual teacher management system is based on analysis of input from the first four components of the program together with self-analysis and a personal philosophy of education resulting from cumulative data gathering and guided decision-making. This analysis makes up the preliminary portion of the fifth component of the undergraduate teacher education program prior to actual engagement in the student teaching practicum. The practicum itself is the developed system in action.

For the matriculated teacher, the program entails the continuous delivery of new information, skills, attributes, and competencies which are incorporated into revised and refined systems. The Management Engineered System of Teacher Education is designed for systematic improvement of processes for the professional educator from the first day in the classroom until retirement. Organizing the delivery system around essential teacher functions should enhance the accountability of teacher training institutions to their constituents and of local education association to their communities.

Finally, the Management Engineered Teacher Education Program is sound. It represents the scientific/rational dimensions of planning. It takes into account total system objectives, the systems environment, the resources of the system, the components of the system, and the management of the system. For teacher education, the Management Engineered Program goes beyond competency and control. It delves into the very core of management technology.

REFERENCES

1. Ames, Michael D., "Beyond Competency and Control: Teachers as Managers." The Elementary School Journal. Volume 79, Number 1, University of Chicago Press, September, 1978.

2. Dick, Walter and Casey, Lou, The Systematic Design of Instruction. Dallas, Texas: Scott Foresman and Company, 1978.

3. Hitt, William D., " A Model for Humanistic Educational Management." NASSP Bulletin, May, 1979.

4. Jackson, Noel R. and Zufelt, David L., Individualized Teacher Renewal. Oklahoma: Educational Development Corporation. 975.

5. Webster, A. Merriam. New Collegiate Dictionary, 2nd. Edition, Springfield, Massachusetts: G. C. Merriam Co., 1953.

6. Wong, Martin R. and Raulerson, John D., A Guide to Systematic Instructional Design. New Jersey: Educational Technology Publications, Inc., 1974.